

02/25/02

11050 U.S. PRO

11050 U.S. PRO

10/08/99

02/25/02

#3  
Spec  
L. Hicks  
1/10/02

UNITED STATES PATENT APPLICATION  
OF: JOHN MANOLIS, Ph.D.  
AND OF: PETE MANOLIS  
FOR: NEW RENEWABLE GRAVITY, WIND AND SOLAR  
ENERGY ENGINE

BACKGROUND OF THE INVENTION

5 The present invention relates to a new  
renewable energy engine, which uses gravity, solar  
and wind energy. This engine comprises an engine  
10 block which houses a crankshaft, flying wheels and  
mechanical transmissions. A fulcrum mounted on the  
top of the engine's block, a lever is mounted on the  
fulcrum, the lever may be of various configurations,  
such as, a straight lever or a circular lever. The  
15 fulcrum is mounted on the center of the straight  
lever and diametrically on the center of the  
circular lever. On the ends of the levers and  
across the fulcrum are mounted connecting pins, the  
connecting pins are connected to connecting rods,  
20 the connecting rods extend downward and are  
connected to the crankshaft. The straight lever has  
two straight rails mounted longitudinal on the top.  
The circular lever has two circular rails mounted on  
the top. A motor vehicle with wheels is powered by  
25 a hydrogen fuel cells engine and an electric motor.

10081959.022502



engine.

It is another object of the present invention to provide a new renewable wind, solar and gravity energy engine, which comprises an engine block housing a crankshaft, flying wheels, mechanical transmissions and a fulcrum for the lever.

It is a further object of the present invention to provide a new renewable wind, solar and gravity energy engine, comprises a solar cell panel, a horizontal - axis wind turbine and a battery.

Still it is another object of the present invention to provide a new renewable solar, wind and gravity energy engine, which has a lever with a fulcrum and moving masses.

Still it is a further object of the present invention to provide a new renewable solar, wind and gravity energy engine, which comprises levers, connecting rods and crankshafts.

Yet it is another object of the present invention to provide a new renewable wind, solar and gravity energy engine, in which connecting rods convert levers drive into rotary movement of crankshafts.

Yet it is a further object of the present invention to provide a new renewable wind, solar and

gravity engine, which employs an electric motor and a hydrogen fuel cells engine to move the heavy masses forward and backward over the fulcrum of the lever.

5

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a front and top view of a wind, solar and gravity engine showing the heavy masses past over the fulcrum and forcing downwards the lever and the connecting rod which connecting rod converts lever drive into rotary movement of a crankshaft.

10

Fig. 2 is the same as Fig. 1 showing the heavy masses to pass over the fulcrum to the other side forcing downwards the other end of the lever, which is forcing downwards the connecting rods which convert lever drive into rotary movement of a crankshaft.

15

Fig. 3 is a top and front view of a wind, solar and gravity engine with a circular lever, the heavy masses are rotating clockwise around the lever, when

20

the heavy masses pass over the fulcrum, one side of the circular lever tilts downwards forcing the connecting rods to move downward to convert lever drive into rotary movement of the crankshaft.

5        Fig. 4 is the same as Fig. 3 showing the heavy masses, pass over the fulcrum from one side to the other side to convert lever drive into rotary movement of a crankshaft.

10       Fig. 5 is a top and front view of a wind, solar and gravity engine showing a hybrid leverage, a circular lever and a flat straight lever; both levers are mounted on the same fulcrum, the heavy masses on the straight lever move forward and backward. The heavy masses on the circular lever  
15       circulate clockwise on the circular level; both masses move downward, the connecting rods reciprocally to convert levers drive into rotary movement of a crankshaft.

20       Fig. 6 is the same as Fig. 5 showing the heavy masses pass over the fulcrum from one side of the fulcrum to the other side reciprocally, both masses force the connecting rods to move downward to convert levers drive into rotary movement of the crankshaft.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

Referring now more particularly to the accompanying drawings, wherein like reference numerals designate similar parts throughout the various views, Fig. 1 illustrates an exemplary wind, solar and gravity engine in which the present invention will have particularly advantageous utility. The hybrid solar, gravity and wind engine of the present invention comprises: a lever 1, mounted on a fulcrum 2. The lever 1 is a flat straight board with ends 3 and 4. On top of lever 1 are mounted two rails 7 and 8, a vehicle 9 with wheels 10 and 11 for moving forward and backward, an electric motor 12 and a hydrogen fuel cells engine 13 are mounted on the vehicle 9, heavy masses 20 are mounted on vehicle 9. On walls 5 and 6 of lever 1 are mounted studs 15 and 17 respectively to operate the vehicle to move forward and backward. Also on said walls 5 and 6 of the lever 1 are mounted springs 18 and 19 respectively. When the masses 20 move on to spring 19 the spring 19 is compressed and stores energy. As the masses 20 retreat the spring 19 is decompressed and releases the stored energy to force the masses to move forward toward wall 5. The end 4 of lever 1 moves downward forcing the connecting rods 22 and 23 to

move downward and upward reciprocally to convert  
lever drive into rotary movement of the crankshaft  
21.

Fig. 2 is the same view as Fig. 1, when the  
5 masses 20 move on to spring 18, the spring 18 is  
compressed and stores energy. As the masses 20  
retreat the spring 18 is decompressed and releases  
the stored energy to force the masses 20 to move  
forward toward wall 6. The end 3 of lever 1 moves  
10 downward forcing the connecting roads 22 and 23 to  
move downward and upward reciprocally to convert  
lever drive into rotary movement of the crankshaft  
21.

The lever 1 works because of gravity and stored  
15 energy. Stored energy is released into energy that  
is stored. The electric motor 12 pulls the vehicle  
9 towards fulcrum 2, the fulcrum 2 is the top of the  
first hill. The first hill is the highest of the  
ride. All of the vehicle's energy comes from being  
20 pulled up the first hill, which is the fulcrum 2.

Gravity pulls the vehicle 9 down the hill. The  
power for the rest of the drive comes from the pull  
of gravity and stored energy, not from the electric  
motor 12.

25 Fig. 3 is the same view as in Figs. 1 and 2

comprising a circular lever 36 mounted on the  
 fulcrum 2 on top of the engine's block. Two  
 circular rails 38 and 39 are mounted on top of the  
 circular lever 36. Connecting pins 24 and 25  
 5 mounted on the circular lever 36 and are connected  
 to connecting rods 22 and 23 respectively. A motor  
 vehicle 40 with wheels 43 and 44 and heavy masses  
 42 is running clockwise on the circular lever 36.  
 The vehicle 40 is secured on the lever 36 by a  
 10 beam 45 mounted at 46 and 47. When the vehicle 40  
 is above connecting pin 24 the circular lever 36  
 moves downward forcing the connecting rod 22 to  
 move downward and connecting rod 23 to move upward  
 reciprocally to convert lever drive into rotary  
 15 movement of the crankshaft 21.

Fig. 4 is the same view as in Fig. 3. The  
 vehicle 40 moves uphill and passes the fulcrum 2.  
 The vehicle 40 with the heavy masses 42 stored  
 energy, because the fulcrum 2 is the highest point,  
 20 when the vehicle 40 with the heavy masses 42 passes  
 the fulcrum 2 is running down hill releases the  
 stored energy. The tilting lever 56 moves downward  
 forcing the connecting rod 23 to move downward and  
 the connecting rod 22 to move upward reciprocally  
 25 to convert lever drive into rotary movement of the



crankshaft 21.

Fig. 5 comprises the same engine block as in Figs. 2, 3, and 4 with a combination of levers a straight lever 1 and a circular lever 36 mounted  
5 On the same fulcrum 2, both levers, lever 1 and lever 36 convert lever drive into rotary movement of the crankshaft 21. The straight lever 1 has two straight rails 7 and 8 mounted on top and a vehicle 9 with wheels 10 and 11 and heavy masses 20. The  
10 circular lever 36 has two circular rails 38 and 39 and vehicle 40 with heavy masses 42 and wheels 43 and 44. The vehicle 9 with heavy masses 20 is running forward and backward. The vehicle 40 with heavy masses 42 is circulating clockwise.

15 The vehicles 9 and 40 move across the fulcrum 2, alternately. When vehicle 9 is over connecting pin 25, the connecting pin 25 forces the connecting rod 23 to move downward and the connecting rod 22 to move upward reciprocally to convert lever drive  
20 into rotary movement of the crankshaft 21.

The vehicle 40 with heavy masses 42 is over connecting pin 51, connecting pin 51 forces the connecting rod 53 to move downward and the connecting rod 52 to move upward reciprocally  
25 to convert lever drive into rotary movement of the

crankshaft 21.

Fig. 6 is the same as Fig. 5, the vehicles 9 and 40 moving across the fulcrum 2 alternately. The vehicle 9 is over connecting pin 24. The connecting pin 24 forces the connecting rod 22 to move downward and the connecting rod 23 to move upward reciprocally to convert lever drive into rotary movement of the crankshaft 21. The vehicle 40 with heavy masses 42 is over connecting pin 50, connecting pin 50 forces the connecting rod 52 to move downward and the connecting rod 53 to move upward reciprocally, to convert lever drive into rotary movement of the crankshaft 21.

Moreover, the present invention can adopt modes of various modifications and deformations in addition to any suitable combinations of the aforementioned respective embodiments if it is within the scope of the claims.